



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

XXXX, 2016

Mr. Scott Cranston
Plant Manager - Roaring River Hardboard
Louisiana Pacific Corporation
Post Office Box 98
Roaring River, North Carolina 28669

SUBJECT: Air Quality Permit No. 03909T52
Facility ID: 9700001
Louisiana Pacific Corporation
Roaring River, North Carolina
Wilkes County
Fee Class: Title V
PSD Status: Major

Dear Mr. Cranston:

In accordance with your completed Air Quality Permit Applications for administrative amendments received May 16, 2014 and January 12, 2015, with a Reopening for Cause application under 15A NCAC 2Q .0517 initiated on October 20, 2014, and with your completed Air Quality Permit Application for a significant modification under 15A NCAC 02Q .0501(c)(1) received February 19, 2016, we are forwarding herewith Air Quality Permit No. 03909T52 to Louisiana Pacific Corporation, 1151 Abtco Road, North Wilkesboro, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from

the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Wilkes County has been triggered for increment tracking under PSD for sulfur dioxide (SO₂) and PM₁₀. However, no changes in actual emissions of these pollutants are associated with this permit modification.

This Air Quality Permit shall be effective from XXXX, 2016 until October 31, 2017 is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Betty Gatano, P.E., (919) 707-8736 or betty.gatano@ncdenr.gov.

Sincerely yours,

William D Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

cc: Heather Ceron, EPA Region 4
Winston-Salem Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to Air Permit No. 03909T52

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source I.D.	Emission Source Description
IES-G1, IES-G2, IES-G3, and IES-G4	Four gasoline-fired generators; 5,000, 5,000, 4,000, and 5,000 watt capacity, respectively.
IES-LP IT-9 and IES-LP IT-10	Two bulk storage tanks (10,000 gallons each) for water-based paint
IES-LP IT-1	Diesel Fuel Tank
IES-LP IT-2	Diesel Fuel Tank
IES-LP IT-3	Kerosene Tank
IES-LP IT-4	Gasoline Tank
IES-LP IT-5	Used Oil Tank; Vehicle Maintenance Area
IES-LP IT-6	Diesel Fuel Tank; FP-1
IES-LP IT-7	Linseed Oil Tank
IES-LP IT-11	Latex Edge Sealer Tank
IES-LP IT-12	Fibertite Tank
IES-LP IT-13	Compregnite Tank #1
IES-LP IT-14	Compregnite Tank #2
IES-LP IT-15	Resin Tank
IES-LP IT-16	Resin Tank
IES-LP IT-17	Line 1 Broke Chest
IES-LP IT-19	Scrubber Recycled White Water Tank
IES-LP IT-20	Hydraulic Oil Tank; Maintenance Shop
IES-LP IT-23	Hydraulic Oil Tank; Vehicle Maintenance Shop
IES-LP IT-24	Compregnite Day Tank
IES-LP IT-39	Propane Tank
IES-LP IT-40	Propane Tank
IES-LP IT-41	Propane Tank
IES-LP IT-42	Propane Tank
IES-LP IT-43	Propane Tank
IES-LP IT-44	Line 1 Vorjects Chest
IES-LP IT-45	Line 1 Washed Stock Chest
IES-LP IT-47	Line 1 Refiner WW Chest
IES-LP IT-48	Line 1 Dust Chest #1
IES-LP IT-50	Line 1 WW Surge Chest
IES-LP IT-51	Line 1 Repulper Chest
IES-LP IT-52	Line 1 Lean White Water Chest
IES-LP IT-53	Line 1 Rich White Water Chest
IES-LP IT-54	Line 1 Slush Overlay Primary Chest
IES-LP IT-55	Line 1 Chemical Mix Chest
IES-LP IT-56	Line 1 Slush Overlay Machine Chest
IES-LP IT-57	Line 1 Machine Chest
IES-LP IT-58	Line 1 Chip Washer Tank
IES-LP IT-59	Line 1 Saveall Chest
IES-LP IT-60	Line 1 Seal Pit
IES-LP IT-61	Deculator Seal Pit
IES-LP IT-62	Line 2 Vorjects Chest
IES-LP IT-63	Line 2 Washed Stock Chest
IES-LP IT-65	Line 2 Refiner WW Chest
IES-LP IT-66	Line 2 Dust Chest
IES-LP IT-68	Line 2 WW Surge Chest
IES-LP IT-69	Line 2 Repulper Chest

Emission Source I.D.	Emission Source Description
IES-LP IT-70	Line 2 Lean White Water Chest
IES-LP IT-71	Line 2 Rich White Water Chest
IES-LP IT-72	Line 2 Slush Overlay Primary Chest
IES-LP IT-73	Line 2 Chemical Mix Chest
IES-LP IT-74	Line 2 Slush Overlay Machine Chest
IES-LP IT-75	Line 2 Machine Chest
IES-LP IT-76	Line 2 Chip Washer Tank
IES-LP IT-77	Line 2 Saveall Chest
IES-LP IT-78	Line 2 Seal Pit
IES-LP IT-80	Line 1 Linseed Oil Day tank
IES-LP IT-81	Line 2 Linseed Oil Day tank
IES-SW	Stock Washing Operations
IES-CT	Cooling Tower
IES-LP IT-82	Fiberite Day Tank #1
IES-LP IT-83	Fiberite Day Tank #2
IES-LP IT-84	Edge Resin Tank #1
IES-LP IT-85	Edge Resin Tank #2
IES-LP IT-86	Compregnite Tank #3
IES-LP IT-87	Compregnite Mix Tank
IES-LP IT-88	Diesel Fuel Tank; FP-2
IES-LP IT-89	Wax Tank

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100, "Control of Toxic Air Pollutants," or 15A NCAC 02Q .0711, "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of GACT/MACT see the DAQ page titled "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities." The link to this site is as follows:
<http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes to Permit

The following changes were made to the Louisiana Pacific - Roaring River Plant Air Permit No. 03909T51:

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
Cover and throughout	--	Cover and throughout	--	Updated all dates and permit revision numbers.
--	Insignificant Activities List	--	Insignificant Activities List	<ul style="list-style-type: none"> Removed glue tank (ID No. IES-LP-IT-8). Removed two No. 6 fuel oil storage tanks (ID Nos. IES-FT.A and IES-FT.B). Removed two No. 6 fuel oil tanks (ID Nos. IES-FT1 and IES-FT2).
3 – 6	1.0 – Equipment List	3 – 6	1.0 – Equipment List	<ul style="list-style-type: none"> Added a shake line to the woodworking equipment (ID No. ES-4). Revised the description of lap coating line (ID No. ES-LL). Removed No. 6 fuel oil as a permitted fuel for boilers (ID Nos. ES-B1, ES-B2, and ES-B3). Updated the water injection rate for the fan impingement type scrubber (ID No. CD-2) to 104.4 gallons per minute, as measured in stack test on November 19, 2014. Added asterisk and footnote for the venturi scrubber (ID No. CD-4) on the biomass/natural gas-fired boiler hybrid suspension grate type (ID No. ES-B3) specifying that it will control the boiler until the initial startup of the electrostatic precipitator (ID No. CD-4a). Added an electrostatic precipitator (ID No. CD-4a) as control for the biomass/natural gas-fired boiler hybrid suspension grate type (ID No. ES-B3). Removed asterisks from permitted equipment. The asterisks pertained to footnotes that were removed when the permit was renewed under Air Permit No. 03909T49 issued on November 13, 2012.
7	2.1.A – Regulations Table	7	2.1.A – Regulations Table	Changed the reference to 15A NCAC 02D .0515, “Particulates from Miscellaneous Industrial Processes” to 15A NCAC 02D .0512, “Particulates from Wood Products Finishing Plants.” This rule is applicable to “particulate matter caused by the <i>working</i> , sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere...”
7	2.1.A.1	7	2.1.A. 1	Changed the regulations to 15A NCAC 02D .0512, “Particulates from Wood Products Finishing Plants.” The monitoring, recordkeeping, and reporting requirements under this rule are the same as under 15A NCAC 02D .0515, “Particulates from Miscellaneous Industrial Processes.”

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
9 – 10	2.1.B – Regulations Table	9	2.1.B – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02Q .0705. This rule was repealed on May 1, 2014. Changed the term “State Only Requirement” to “State Enforceable Only.”
11 – 14	2.1.B.2.b through f	11 – 13	2.1.B.2.b through h.	Renumbered these sections to make them consistent with remainder of the permit.
15	2.1.C.1.c	14	2.1.C.1.c	Added noncompliance statement.
16	2.1.C.2.d	15	2.1.C.2.d	Added noncompliance statement.
16 – 17	2.1.D – Regulations Table	15	2.1.D – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02Q .0705. This rule was repealed on May 1, 2014. Changed the term “State Only Requirement” to “State Enforceable Only.”
18	2.1.D.4.b	17	2.1.D.4.b	Added noncompliance statement.
18 – 19	2.1.E – Equipment List	17	2.1.E – Equipment List	<ul style="list-style-type: none"> Removed No. 6 fuel oil as a permitted fuel for boilers (ID Nos. ES-B1, ES-B2, and ES-B3). Added asterisk and footnote for the venturi scrubber (ID No. CD-4) on the biomass/natural gas-fired boiler hybrid suspension grate type (ID No. ES-B3) specifying that it will control the boiler until the initial startup of the electrostatic precipitator (ID No. CD-4a). Added an electrostatic precipitator (ID No. CD-4a) as control for the biomass/natural gas-fired boiler hybrid suspension grate type (ID No. ES-B3).
19 – 21	2.1.E – Regulations Table	17 – 18	2.1.E – Regulations Table	<ul style="list-style-type: none"> Removed requirements when firing No. 6 fuel oil under 15A NCAC 02D .0501(e). Updated the Alternative Operating Scenario for boilers (ID Nos. ES-B2 and ES-B3). Removed reference to 15A NCAC 02D .0504 for firing both No. 6 fuel oil and biomass. Removed the term “superseded” from the limit for 15A NCAC 02D .0516. Removed emission limits for firing No. 6 fuel oil for boilers (ID Nos. ES-B1, ES-B2, and ES-B3) under 15A NCAC 02D .1109, Case-by-Case MACT. Removed requirements for monitoring sulfur dioxide under CAM and removed No. 6 fuel oil from boiler descriptions.
21 – 22	2.1.E.1	18 – 19	2.1.E.1	Revised permit condition to remove all requirements associated with firing No. 6 fuel oil in boilers (ID Nos. ES-B1, ES-B2, and ES-B3).
22	2.1.E.2	19	2.1.E.2	<ul style="list-style-type: none"> Updated emission limit to 0.25 pounds per million Btu. Revised permit condition for 15A NCAC 02D .0503 to remove all requirements associated with firing No. 6 fuel oil in boilers (ID Nos. ES-B1, ES-B2, and ES-B3). No monitoring, recordkeeping, or reporting is required for firing natural gas in these boilers.
23	2.1.E.3.b	19	2.1.E.3.b	Updated testing condition with most current language.

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
23	2.1.E.3.c	19	2.1.E.3.c	<ul style="list-style-type: none"> Added asterisk and footnote for the venturi scrubber (ID No. CD-4) on the biomass/natural gas-fired boiler hybrid suspension grate type (ID No. ES-B3) specifying that it will control the boiler until the initial startup of the electrostatic precipitator (ID No. CD-4a). Added requirements for electrostatic precipitator (ID No. CD-4a) and associated monitoring requirements.
23	2.1.E.3.e	19	2.1.E.3.e	Add requirement to maintain any maintenance performed on the scrubbers (ID No. CD-2 and CD-4) or the electrostatic precipitator (ID No. CD-4a).
23	2.1.E.4	--	--	<ul style="list-style-type: none"> Removed requirement under 15A NCAC 02D .0504 for co-firing No. 6 fuel oil and biomass in boilers (ID Nos. ES-B2 and ES-B3). Renumbered the remainder of the section accordingly.
23 – 24	2.1.E.5	20	2.1.E.4	Updated permit condition for 15A NCAC 02D .0516 to remove references to No. 6 fuel oil. No monitoring, recordkeeping, or reporting is required for firing natural gas or biomass in these boilers.
24	2.1.E.6.d	20	2.1.E.5.d	Added requirement to establish normal visible emissions within the first 30 days of the initial startup of boiler (ID No. ES-B3) with associated multicyclone (ID No. CD-3) and electrostatic precipitator (ID No. CD-4a).
25	2.1.E.7.d	21	2.1.E.6.d	Removed parenthetical statement, “(The SO ₂ limitation for ambient standards precedes this condition.)” The PSD avoidance condition is for NO _x emissions and does not involve SO ₂ emissions.
25	2.1.E.8.c	21	2.1.E.7.c	<ul style="list-style-type: none"> Added asterisk and footnote for the venturi scrubber (ID No. CD-4) on the biomass/natural gas-fired boiler hybrid suspension grate type (ID No. ES-B3) specifying that it will control the boiler until the initial startup of the electrostatic precipitator (ID No. CD-4a). Added reference to the electrostatic precipitator (ID No. CD-4a).
25 – 26	2.1.E.9	--	--	<ul style="list-style-type: none"> Removed permit condition for 15A NCAC 02D .0530(u) for the boiler (ID No. ES-B3) to control emission from zones 3 through 7 of Line 1 steam-heated bake oven (ID No. ES-L1BO) and of Line 2. The five-year record keeping requirements have been met. Renumbered the remainder of the section accordingly.
26	2.1.E.11.a	22	2.1.E.9.b	Corrected compliance date for the “NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters,” 40 CFR 63 Subpart DDDDD.

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
26	2.1.E.11.b	--	--	Removed No. 6 fuel oil emission limits for the Case-by-Case MACT for boilers (ID Nos. ES-B1, ES-B2, and ES-B3).
26 – 27	2.1.E.11.d and e	22 – 23	2.1.E.9.e and f	Updated testing requirements for boilers (ID Nos. ES-B2 and ES-B3) under the Case-by-Case MACT.
27	2.1.E.11.i	23	2.1.E.9.j	Added value for the water injection rate for the fan impingement type scrubber (ID No. CD-2) measured during the performance test on November 9, 2014.
27	2.1.E.11.i	23	2.1.E.9.k	<ul style="list-style-type: none"> Added value for the water injection rate for the venturi scrubber (ID No. CD-4) measured during the performance test on April 2, 2014. Added asterisk and footnote for the venturi scrubber (ID No. CD-4) on the biomass/natural gas-fired boiler hybrid suspension grate type (ID No. ES-B3) specifying that it will control the boiler until the initial startup of the electrostatic precipitator (ID No. CD-4a).
--	--	23	2.1.E.9.l	Added requirement that secondary power has to be maintained at level measured during testing.
--	--	23	2.1.E.9.n	Added monitoring requirements for secondary power of the electrostatic precipitator (ID No. CD-4a) on boiler (ID No. ES-B3).
28	2.1.E.11.l	23	2.1.E.9.o	Added monitoring and recordkeeping requirements for secondary power of the electrostatic precipitator (ID No. CD-4a) on boiler (ID No. ES-B3).
--	--	24	2.1.E.10	Added permit condition for 15A NCAC 02D .0530(u) for the project to add the ESP (ID No. CD-4a) on the boiler (ID No. ES-B3)
--	--	25	2.1.E.11	Added requirement under NCGS 143-215.108 requiring the Permittee to submit notification of the actual date of initial startup of the boiler (ID No. ES-B3) with associated multicyclone (ID No. CD-3) and electrostatic precipitator (ID No. CD-4a).
30	2.1.F.5.a	26	2.1.F.5.b	Updated compliance date for the “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters,” 40 CFR 63 Subpart DDDDD.
30	2.1.G – Regulations Table	26 – 27	2.1.G – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02Q .0705. This rule was repealed on May 1, 2014. Changed the term “State Only Requirement” to “State Enforceable Only.”
31	2.1.H.1.b	27	2.1.H.1.b	Updated testing condition with most current language.
31	2.1.H.2.b	27	2.1.H.2.b	Updated testing condition with most current language.
32	2.1.I	29	2.1.I	Added identification numbers for the back-up fire pumps.
33	2.1.I.1.b	29	2.1.I.1.b	Updated testing condition with most current language.

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
33	2.1.I.2.b	29	2.1.I.2.b	Updated testing condition with most current language.
36	2.1.J – Regulations Table	31	2.1.J – Regulations Table	Changed the term “State Only Requirement” to “State Enforceable Only.”
36	2.2.A – Regulations Table	32	2.2.A – Regulations Table	<ul style="list-style-type: none"> Removed reference to 15A NCAC 02Q .0705. This rule was repealed on May 1, 2014. Changed the term “State Only Requirement” to “State Enforceable Only.”
36	2.2.A.1.a	32	2.2.A.1.a	Removed reference to 15 pounds per day of VOC from permit condition for 15A NCAC 2D .0958.
29	2.2.A.4	--	--	<ul style="list-style-type: none"> Removed permit condition for 15A NCAC 02Q .0705, “Existing Sources and SIC calls.” This rule was repealed on May 1, 2014. Renumbered the permit accordingly.
39 – 41	2.2.B.e through m	35 – 36	2.2.B.e through j	<ul style="list-style-type: none"> Rearranged the permit conditions so that the recordkeeping requirements come before the reporting requirements to be consistent with the remainder of the permit. Changes the term “the Permittee must” to “the Permittee shall” throughout the section. Corrected the numbering of the recordkeeping and reporting requirements.
41	2.3.A	37	2.3.A	<ul style="list-style-type: none"> Changed the requirement to conduct “weekly visible emission observations” to “daily visible emission observations” for the wood collection and transfer systems. Added reporting requirements.
42 - 43	2.3.B	38 – 39	2.3.B	<ul style="list-style-type: none"> Removed No. 6 fuel oil as a permitted fuel for the boiler (ID No. ES-B2). Specified that the unit was a small PSEU. Changed monitoring to 12-hour block averages. Updated the minimum flow rate to 104.4 gallons per minute, which was measured during the November 2014 testing. Added reporting requirements.
43 – 45	2.3.C	39 – 40	2.3.C	<ul style="list-style-type: none"> Removed No. 6 fuel oil as a permitted fuel for the boiler (ID No. ES-B3). Specified that the unit was a small PSEU. Changed monitoring to 12-hour block averages. Updated the minimum flow rate for the venturi scrubber (ID No. CD-4) to 953 gallons per minute, which was measured during the April 2014 testing. Added reporting requirements. Added asterisk and footnote for the venturi scrubber (ID No. CD-4) specifying that it will control the boiler (ID No. ES-B3) until the initial startup of the electrostatic precipitator (ID No. CD-4a).

Previous Permit		New Permit		Description of Changes
Page No.	Section	Page No.	Section	
--	--	40 – 40	2.3.D	<ul style="list-style-type: none"> • Removed No. 6 fuel oil as a permitted fuel for the boiler (ID No. ES-B3). • Changed scrubber on the boiler to an electrostatic precipitator (ID No. CD-4a). • Specified that the unit was a small PSEU. • Changed monitoring to 12-hour block averages. • Required secondary power as a monitoring parameter.
45 – 46	2.3.D	--	--	Removed CAM requirement for SO ₂ for boiler (ID No. ES-B2). With the removal No. 6 fuel oil as a permitted fuel, the boiler can meet all SO ₂ emission limits without controls.
46 – 47	2.3.E	--	--	Removed CAM requirement for SO ₂ for boiler (ID No. ES-B2). With the removal No. 6 fuel oil as a permitted fuel, the boiler can meet all SO ₂ emission limits without controls.
48 – 57	Section 3.0	42 – 50	Section 3.0	Updated General Conditions and List of Acronyms with latest version (v4.0 12/27/2015).



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03909T52	03909T51	XXXX, 2016	October 31, 2017

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	Louisiana Pacific Corporation
Facility ID:	9700001
Facility Site Location:	1151 Abtco Road
City, County, State, Zip:	North Wilkesboro, Wilkes County, North Carolina, 28659
Mailing Address:	Post Office Box 98
City, State, Zip:	Roaring River, North Carolina, 28669
Application Number:	9700001.14A, 9700001.14B, 9700001.15A, and 9700001.16A
Complete Application Date:	May 16, 2014, October 20, 2014, January 15, 2015, and February 19, 2016
Primary SIC Code:	2493
Division of Air Quality, Regional Office Address:	Winston-Salem Regional Office 450 West Hanes Mill Road, Suite 300 Winston-Salem, NC 27105

Permit issued this the XXXth day of June, 2016

William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

SECTION 1: PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

- 2.1- Emission Source(s) Specific Limitations and Conditions
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2- Multiple Emission Source(s) Specific Limitations and Conditions
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3- Compliance Assurance Monitoring (CAM) – 40 CFR, Part 64

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

SECTION 1-PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Wood Yard Area				
7, 33	ES-FS1	Fuel wood system	CD-FS-1	bagfilter (2,370 sq. ft. of filter area)
7	ES-RC2	No. 2 reclaim rechipper	CD-RC2-A	cyclone (72 inches in diameter)
7	ES-PRS	Pneumatic rock separator	CD-WC4	cyclone (108 inches in diameter)
Woodwaste Collection and Transfer Systems				
13, 37	ES-1A/1B CAM	Woodworking equipment consisting of sawing and scoring equipment	BH1A/1B	Two parallel bagfilters; 3,702 sq. ft. of filter area (total for both)
13, 37	ES-2A CAM	Woodworking equipment consisting of the Newman station, and scoring, sawing, and sanding equipment	BH2A	fabric filter; 3,993 sq. ft. of filter area
13, 37	ES-2B CAM	Woodworking equipment consisting of a shake machine, Weima grinder, and scoring equipment	BH2B	fabric filter; 3,993 sq. ft. of filter area
13, 37	ES-3 CAM	Woodworking equipment consisting of lap line sanding, the ripper machine, and the fixed knife waste chopper	BH3	fabric filter; 3,678 sq. ft. of filter area
13, 37	ES-4 CAM	Woodworking equipment consisting of the panel line sanding unit, the Newman sanding station, the Newman machine, a shake line, and the glue line sanding unit	BH4	fabric filter; 6,921 sq. ft. of filter area
14, 37	ES-5 CAM	Pneumatic woodwaste transfer system No. 5	BH5	fabric filter; 1,232 sq. ft. of filter area
Thermomechanical Pulpung Systems				
9	ES-L1D1 (CG) MACT DDDD	Line 1, digester 1	CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and an approximate flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is 125 gallon per minute.
9	ES-L1D2 (CG) MACT DDDD	Line 1, digester 2	CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and a flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is approximately 125 gallon per minute.
9	ES-L1R1 through ES-L1R4 MACT DDDD	Line 1, four refiners	N/A	N/A

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
9	ES-L02D1 (CG) MACT DDDD	Line 2, digester 1	CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and an approximate flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is approximately 125 gallon per minute.
9	ES-L02D2 (CG) MACT DDDD	Line 2, digester 2	CD-TMP1	Two stage countercurrent scrubber with water as the scrubbing medium and an approximate flow rate of 2,000 gallons per minute in the first stage. The flow rate in the second stage is approximately 125 gallon per minute.
9	ES-L2R1 through ES-L2R4 MACT DDDD	Line 2, four refiners	N/A	N/A
Hardboard Manufacturing Equipment Lines (273.5 million square feet (MMSF) of board on a 1/2" thickness basis per year throughput capacity)				
8	ES-L1P (DG) MACT DDDD	Line 1 press with unloader (40,520 square feet board per hour throughput combined capacity for ES-L1P and ES- L2P)	N/A	N/A
8	ES-L1BO (DG)(PG) MACT DDDD	Line 1 steam-heated bake oven	ES-B3 - For control of zones 3 through 7	Biomass/ natural gas-fired boiler (183 million Btu per hour rated capacity)
8	ES-L1BC MACT DDDD	Line 1 board cooler	N/A	N/A
8	ES-L1CH MACT DDDD	Line 1 compregnite hood	N/A	N/A
8	ES-L1LVP MACT DDDD	Line 1 large vacuum pump	N/A	N/A
8	ES-L1HDP MACT DDDD	Line 1 high density pump	N/A	N/A
8	ES-L1H MACT DDDD	Line 1 humidifiers	N/A	N/A
8	ES-L1IH MACT DDDD	Line 1 inspection hood	N/A	N/A
8	ES-L1SVP MACT DDDD	Line 1 small vacuum pump	N/A	N/A
8	ES-L2P (DG) MACT DDDD	Line 2 press with unloader (40,520 square feet board per hour throughput combined capacity for ES-L1P and ES- L2P)	N/A	N/A
8	ES-L2BO (DG)(PG) MACT DDDD	Line 2 steam-heated bake oven	ES-B3 - For control of zones 3 through 7	Biomass/ natural gas-fired boiler (183 million Btu per hour rated capacity)
8	ES-L2BC MACT DDDD	Line 2 board cooler	N/A	N/A

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
8	ES-L2CH MACT DDDD	Line 2 compregnite hood	N/A	N/A
8	ES-L2LVP MACT DDDD	Line 2 large vacuum pump	N/A	N/A
8	ES-L2HDP MACT DDDD	Line 2 high density pump	N/A	N/A
8	ES-L2H MACT DDDD	Line 2 humidifiers	N/A	N/A
8	ES-L2IH MACT DDDD	Line 2 inspection hood	N/A	N/A
8	ES-L2SVP MACT DDDD	Line 2 small vacuum pump	N/A	N/A
8	ES-MBH MACT DDDD	Line 1 and Line 2 Mechanical Board Humidifiers	N/A	N/A
Trimboard Manufacturing				
26, 35	ES-TB-1 MACT QQQQ	Trimboard line with cold press (16,000 square feet per hour throughput capacity)	N/A	N/A
Finishing Lines				
15, 35	ES-LL MACT QQQQ	Lap Coating Line (56,000 square feet board per hour throughput capacity) consisting of a sander, one fan coater station, a roto-wipe, an edge coater and edge spray station, a curtain coater, and seven gas and electric IR dry and cure ovens.	N/A	N/A
15, 35	ES-PL MACT QQQQ	Panel coating line (50,600 square feet board per hour throughput capacity) consisting of a sanding booth, two roll coaters, a curtain coater, three IR dryer/ovens and six gas dry and cure ovens	N/A	N/A
15, 35	ES-SM MACT QQQQ	Groove sealer spray booth	N/A	N/A
15	ES-SE MACT DDDD	Shake edge seal spray booth	N/A	N/A
Steam Production				
17	ES-B1 CASE-BY-CASE MACT	Natural gas-fired boiler (44.4 million Btu per hour rated capacity)	N/A	N/A
17, 38	ES-B2 ^b CASE-BY-CASE MACT CAM	Biomass/ natural gas-fired hybrid suspension grate type boiler (79 million Btu per hour rated capacity)	CD-1 CD-2	multicyclone (49, nine-inch diameter tubes) and fan impingement type scrubber (Approximately 104.4 gallons per minute water injection rate)

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
17, 39, 40	ES-B3 ^{a, b} PSD BACT FOR PM CASE-BY-CASE MACT CAM	Biomass/natural gas-fired boiler hybrid suspension grate type (183 million Btu per hour rated capacity) and associated over-fire air (OFA) / under grate air (UGA) low-NOx control equipment	CD-3 and CD-4 ^c or CD-4a	multicyclone (176, nine-inch diameter tubes) and wet venturi scrubber (Approximately 953 gallons per minute caustic/water injection rate) ^c or electrostatic precipitator (42,269 square feet of plate area)
25	ES-B4T ^a NSPS Dc CASE-BY-CASE MACT	Natural gas-fired temporary boiler (56.3 million Btu per hour nominal heat input rate) equipped with low-NOx burner	N/A	N/A
25	ES-B5T ^a NSPS Dc CASE-BY-CASE MACT	Natural gas-fired temporary boiler (99 million Btu per hour nominal heat input rate) equipped with low-NOx burner	N/A	N/A
Miscellaneous				
27	ES-DGEN1, ES-DGEN2 NSPS IIII	Two backup diesel-fired generators (each with a rating not to exceed 500 brake horsepower)	N/A	N/A
27	ES-DGEN3 NSPS IIII	Temporary diesel-fired emergency generator (with a rating not to exceed 2521 brake horsepower or 1880 Kilowatt)	N/A	N/A
29	ES-FP1, ES-FP2 MACT ZZZZ	Two diesel-fired emergency back-up fire pumps (160 and 215 brake horsepower, respectively)	N/A	N/A
31	ES-WWTP MACT DDDD	Waste water treatment plant	N/A	N/A

^a. The boiler (**ID No. ES-B3**) is not permitted to operate concurrently, when boilers (**ID Nos. ES-B4T and ES-B5T**) are operating. Similarly, boilers (**ID Nos. ES-B4T and ES-B5T**) are not permitted to operate concurrently, when boiler (**ID No. ES-B3**) is operating.

^b. Boilers (**ID Nos. ES-B2 and ES-B3**) have been determined to meet the definition in 40 CFR Part 63 Subpart DDDDD for classification as hybrid suspension grate boilers.

^c. The boiler (**ID No. ES-B3**) shall be controlled by the venturi scrubber (**ID No. CD-4**) until initial startup of the electrostatic precipitator (**ID No. CD-4a**).

(DG) - Debit generating sources for MACT DDDD.

(CG) - Credit generating sources for MACT DDDD.

(PG) - Partial credit generating sources for MACT DDDD.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 -Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Fuel wood system (ID No. ES-FS1) with bagfilter (ID No. CD-FS1)

No. 2 reclaim rechipper (ID No. ES-RC2) with simple cyclone (ID No. CD-RC2-A)

Pneumatic rock separator (ID No. ES-PRS) with simple cyclone (ID No. CD-WC4)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM/PM10	Adequate ductwork and properly designed collectors	15A NCAC 02D .0512
Visible emissions	<i>ID Nos. ES-RC2 and ES-FS1</i> : 40 percent opacity	15A NCAC 02D .0521(c)
	<i>ID No. ES-PRS</i> : 20 percent opacity	15A NCAC 02D .0521(d)

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

Monitoring [15A NCAC 02Q .0508(f)]

- b. Particulate matter emissions from the fuel wood system (**ID No. ES-FS1**), No. 2 reclaim rechipper (**ID No. ES-RC2**), and pneumatic rock separator (**ID No. ES-PRS**) shall be controlled with cyclones (**ID Nos. CD-FS1, CD-RC2-A, and CD-WC4, respectively**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
 - i. a monthly external visual inspection of each system's ductwork and material collection units for leaks; and
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the cyclones noting the structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork and cyclones are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The results of inspection and maintenance for the ductwork and cyclones shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of maintenance performed on any control device or collection system.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the rock separator (**ID No. ES-PRS**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.
- b. Visible emissions from the reclaim rechipper and fuel wood system (**ID Nos. ES-RC2 and ES-FS1**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a. (**ID No. ES-PRS**) or b. (**ID Nos. ES-RC2 and ES-FS1**) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- d. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a. and b. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

B. Manufacturing Line No. 1 including:

- ¹Line 1 hardboard press with unloader (**ID No. ES-L1P**),
- ¹Line 1 steam heated bake oven (**ID No. ES-L1BO**), and
- ¹Line 1 board cooler (**ID No. ES-L1BC**).

Manufacturing Line No. 2 including:

- ¹Line 2 hardboard press with unloader (**ID No. ES-L2P**),
- ¹Line 2 steam heated bake oven (**ID No. ES-L2BO**), and
- ¹Line 2 board cooler (**ID No. ES-L2BC**).

¹ Opacity requirements apply to manufacturing lines only because there are no visible emissions anticipated from the thermomechanical pulping lines.

Thermomechanical Line No. 1 including:

**Digesters 1 and 2 (ID Nos. ES-L1D1 and ES-L1D2), and
Line 1 refiners 1, 2, 3, and 4 (ID Nos. ES-L1R1, ES-L1R2, ES-L1R3, and ES-L1R4).**

Thermomechanical Line No. 2 including:

**Digesters 1 and 2 (ID Nos. ES-L02D1 and ES-L02D2), and
Line 2 refiners 1, 2, 3, and 4 (ID Nos. ES-L2R1, ES-L2R2, ES-L2R3, and ES-L2R4).**

The sources (ID Nos. ES-L1D1, ES-L1D2, ES-L02D1 and ES-L02D2) are controlled by a two stage countercurrent scrubber (ID No. CD-TMP1) with water as the scrubbing medium and a flow rate of approximately 2,000 gallons per minute in the first stage. The flow rate in the second stage is approximately 150 gallon per minute.

Zone 3 through 7 of the sources (ID Nos. ES-L1BO and ES-L2BO) are controlled by boiler No. 3 (ID No. ES-B3).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions ¹	Manufacturing Line No. 1 emission sources: 40 percent opacity	15A NCAC 02D .0521(c)
	Manufacturing Line No. 2 emission sources: 20 percent opacity	15A NCAC 02D .0521(d)
HAPs	National Emission Standards for Hazardous Air pollutants from Plywood and Composite Wood Products	15A NCAC 02D.1111 40 CFR 63, Subpart DDDD
Toxic air pollutants	State Enforceable Only Facility-Wide, Toxics Permitting Emission Rates See Section 2.2 A.3	15A NCAC 02Q .0711
Odor	State Enforceable Only Odor control requirements See Section 2.2 A.5	15A NCAC 02D .1806

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the Manufacturing line 2 (**ID Nos. ES-L2P, No. ES-L2BO, and ES-L2BC**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.
- b. Visible emissions from the Manufacturing line 1 (**ID Nos. ES-L1P, ES-L1BO, and ES-L1BC**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a. or b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- d. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.1.a. and b. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .1111 [40 CFR 63, Subpart DDDD]: NESHAP for Plywood and Composite Wood Products Manufacture

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDD by October 1, 2008. [40 CFR 63.2233(b)]

- a. The Permittee submitted the required notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR Part 63.10(d)(2). The NOC consisted of:
 - i. compliance test results or other initial compliance demonstration, as appropriate, submitted to the DAQ regional office,
 - ii. a permit application submitted to the DAQ central office for the incorporation of all work practice standards, emission limits, and monitoring, recordkeeping, and reporting requirements to this permit, and
 - iii. the Permittee has developed and implemented a plan for review and approval to address how organic HAP captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained. This plan was submitted with the Notification of Compliance Status. [40 CFR 63.2268]

Emissions Averaging Compliance Option

- b. The Permittee shall comply with all applicable provisions of "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDD by emissions averaging compliance option. By using this option, the Permittee shall demonstrate that emissions included in the emissions average meet the compliance options and operating requirements [40 CFR Sec. 63.2240(c)]
 - i. The Permittee shall calculate the required (RMR) and (AMR) actual mass removal for each semiannual emissions averaging compliance period using the emission factors mentioned below and as per the equations below:

$$RMR = 0.90 \times \left(\sum_{i=1}^n UCEP_i \times OH_i \right) \quad (\text{Eq. 1})$$

$$AMR = \left(\sum_{i=1}^n CD_i \times OCEP_i \times OH_i \right) \quad (\text{Eq. 2})$$

$$AMR \geq RMR \quad (\text{Eq. 3})$$

Where:

- RMR = required mass removal of total HAP from all debit generating sources (i.e., all process units that are either uncontrolled or undercontrolled, ID Nos. ES-L1P, ES-L2P, ES-L1BO, and ES-L2BO), pounds per semiannual period
- AMR = actual mass removal of total HAP from all credit generating sources (i.e., all process units that are controlled as part of the Emissions Averaging Plan including credits from debit-generating process units that are under-controlled, ID Nos. ES-L1D1, ES-L1D2, ES-L02D1, ES-L02D2, ES-L1BO, and ES-L2BO), pounds per semiannual period;
- UCEPi = mass of total HAP from an uncontrolled or under-controlled process unit (i) that generates debits, pounds per bone dry ton;
- OHi = number of bone dry tons a process unit (i) generated during the semiannual period;
- CDi = control system efficiency for the emission point (i) for total HAP, expressed as a fraction, and not to exceed 90 percent, unitless (Note: To calculate the control system efficiency of biological treatment units that do not meet the definition of biofilter in Sec. 63.2292, the Permittee must use 40 CFR part 63, appendix C, Determination of the Fraction Biodegraded (Fbio) in a Biological Treatment Unit.);
- OCEPi = mass of total HAP from a process unit (i) that generates credits (including credits from debit-generating process units that are under-controlled), pounds per bone dry ton;
- 0.90 = required control system efficiency of 90 percent multiplied, unitless. This will be 0.0 when the control devices are bypassed.

The list of debit-generating sources, credit-generating sources, and partial credit-generating sources are listed below with their emission factors:

Debit-generating sources
Line 1 press and unloader: ES-L1P;
Line 2 press and unloader: ES-L2P
Line 1 steam-heated bake oven: ES-L1BO
Line 2 steam-heater bake oven: ES-L2BO
Emission Factors: 1) HAP emissions from the presses are 0.755 lb per bone dry ton (BDT) of product. 2) HAP emissions from unloaders are 0.085 lb per bone dry ton (BDT) of product. 3) HAP emissions from uncontrolled zone of the bake oven are 0.092 lb per bone dry ton (BDT) of product.
Credit-generating sources
Line 1, digester 1: ES-L1D1
Line 1, digester 2: ES-L1D2
Line 2, digester 1: ES-L02D1
Line 2, digester 2: ES-L02D2
¹ Emission Factors: 1) The before control HAP emissions from the digester purge are 1.70 lb per bone dry ton (BDT) of product.
Partial credit-generating sources
Line 1 steam-heated bake oven: ES-L1BO
Line 2 steam-heated bake oven: ES-L2BO
Emission Factors: 1) The before control HAP emissions from the controlled zones ^Δ of the bake ovens are ² 0.364 lb per bone dry ton (BDT) of product.

¹- per September 30, 2008 initial performance test (IPT)

²- sum of bake oven zones 3-7 in November 30, 2005 emissions averaging (EA) plan

- ii. The Permittee shall calculate debits and credits as specified in the following paragraphs:
- (A) limit process units in the emissions average to those process units located at the existing affected source.
 - (B) The Permittee cannot use non-operating process units to generate emissions averaging credits. The Permittee cannot use process units that are shut down to generate emissions averaging debits or credits.
 - (C) The Permittee must not include emissions from the following time periods in the emissions averaging calculations:

^Δ Zones 3 to 7

- (1) Emissions during periods of startup, shutdown, and malfunction as described in the startup, shutdown, and malfunction plan (SSMP).
- (2) Emissions during periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities or during periods of control device maintenance covered in the routine control device maintenance exemption. No credits may be assigned to credit-generating process units, and maximum debits must be assigned to debit-generating process units during these periods. [40 CFR 63.2240(c)(2)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the above calculations are not done with the correct emission factors as mentioned in the table above and if the semiannual AMR is less than the semiannual RMR.

- iii. The Permittee shall use the emissions averaging compliance option. The credit- and debit- generating sources and associated control efficiencies are summarized in the following table:

Source ID	Equipment Type	Control Device	Control Efficiency	HAPs Controlled
ES-L1D1 ES-L1D2 ES-L02D1 ES-L02D2	TMP Digesters	Scrubber with blowdown hard-piped to aeration basin (Credit-generating source)	>90%	methanol, acetaldehyde, acrolein, formaldehyde, and propionaldehyde
ES-LIP ES-L2P	Line 1 and Line 2 Presses with Unloaders	None (debit-generating source)	None	N/A
ES-L1BO ES-L2BO	Line 1 and Line 2 Steam Heated Bake Oven	Boiler No. 3 (For control of Zones 3-7) (Partial credit generating source)	>90%	methanol, acetaldehyde, acrolein, formaldehyde, and propionaldehyde

Operating Requirements

- c. The Permittee must meet the following for each process unit or control device used in calculation of emissions averaging credits.
 - i. The Permittee petitioned DAQ for site-specific operating parameters established during the performance test and shall maintain the average operating parameters within the ranges established during the performance test.
 - ii. The Permittee can change the emission factors or the efficiency referenced in this section administratively, by submission of an application.
 - iii. Bake ovens shall be partially controlled by routing a portion of exhaust gases to the flame zone in Boiler No. 3;
 - (A) press capture efficiency was demonstrated to be 100% (October 2004)
 - (B) The CMS for this system shall require monitoring the vent valve positions on the individual bake oven zones. No CMS performance plan shall be required.
 - iv. Scrubber performance shall be monitored with a CMS. As per approved stack test (September 30, 2008) the scrubber capture efficiency was shown to average 99.4%.
 - v. The wastewater treatment plant parameters developed during the Initial Performance Test (IPT) (September 30, 2008) were established with 1,275 HP of aerators operating. Additional aerator basin performance modeling was conducted and submitted (December 17, 2010). The additional modeling submitted has demonstrated 1,000 HP of aerators operating is adequate.
 - a. The CMS for the aeration basin shall require the operating horsepower to be visually monitored daily;
 - vi. A CMS performance evaluation was conducted simultaneous with the performance test (September 30, 2008). The following compliance values and operating ranges for CMS parameters follow:
 - (A) Stage 1 and Stage 2 average hourly water flow rates for the wet scrubber shall be a minimum of 2,228 and 114 (make-up), respectively. Or above the minimum established during the latest performance test.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the Permittee fails to maintain the operating parameters within the ranges established when the controls are being used to generate emissions credits.

Work Practice Requirements

- d. None.

General Requirements

- e. The Permittee must be in compliance with the compliance options at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption. The compliance options do not apply during times when the

process units subject to the compliance options are not operating, or during periods of startup, shutdown, and malfunction. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events. The Permittee must also:

- i. operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i), and
- ii. develop and implement a written SSMP according to the provisions in 40 CFR 63.6(e)(3). [40 CFR 63.2250]

Reporting Requirements

- f. The Permittee must submit a semiannual compliance report according to the following schedule:
 - i. Each compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31; and
 - ii. Each compliance report must be postmarked or delivered no later than July 31 or January 31 for the semiannual reporting period ending on June 30 and December 31, respectively.
 - iii. For startup, shutdown, or malfunction during the reporting period that is not consistent with the SSMP the Permittee must:
 - (A) Inform DAQ by fax or telephone within 2 working days of the actions taken, and
 - (B) Inform DAQ within 7 working days with information as specified in 40 CFR § 63.10(d)(5)(ii). [40 CFR 63.2281, Table 9 of subpart DDDD]
- g. The compliance report must contain the following:
 - i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. If the Permittee had a startup, shutdown, or malfunction during the reporting period and actions taken were consistent with the SSMP, the compliance report must include the information specified in the SSMP;
 - v. The results of any performance tests conducted during the semiannual reporting period;
 - vi. If there are no deviations from any applicable compliance option or operating requirement, a statement that there were no deviations from the compliance options, operating requirements during the reporting period. [40 CFR § 63.2281(c)]
 - vii. If the Permittee decides to install a continuous monitoring system (CMS) and there were no periods during which the continuous monitoring system (CMS), including CEMS (continuous emissions monitoring system) and CPMS (continuous parameter monitoring system), was out-of-control as specified in Sec. 63.8(c)(7), the Permittee needs to provide a statement that there were no periods during which the CMS was out-of-control during the reporting period. [40 CFR § 63.2281(c) (8)]
- h. The Permittee must include in the semiannual compliance report calculations based on operating data from the semiannual reporting period that demonstrate that actual mass removal equals or exceeds the required mass removal. [40 CFR 63.2281 (f)]
- i. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the Permittee fails to meet the reporting schedule or fails to provide information required in the compliance report as specified in Section 2.1.B.2 f through h.

C. Woodworking equipment consisting of sawing and scoring equipment (ID No. ES-1A/1B) with two parallel bagfilters (ID No. BH1A/1B),

Woodworking equipment consisting of the Newman station, and scoring, sawing, and sanding equipment (ID No. ES-2A) with fabric filter (ID No. BH2A),

Woodworking equipment consisting of a shake machine, Weima grinder, and scoring equipment (ID No. ES-2B) with fabric filter (ID No. BH2B),

Woodworking equipment consisting of lap line sanding, the ripper machine, and the fixed knife waste chopper (ID No. ES-3) with fabric filter (ID No. BH3),

Woodworking equipment consisting of the panel line sanding unit, the Newman sanding station, the Newman machine, a shake line, and the glue line sanding unit (ID No. ES-4) with fabric filter (ID No. BH4), and

Pneumatic woodwaste transfer system (ID No. ES-5) with fabric filter (ID No. BH5).

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM/PM10	Adequate ductwork and properly designed collectors	15A NCAC 02D .0512
Visible emissions	Opacity shall not exceed 20 percent opacity (for ID Nos. ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5)	15A NCAC 02D .0521
PM	CAM for Bagfilters installed on ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5 See Section 2.3	15A NCAC 02D .0614

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

Monitoring [15A NCAC 02Q .0508(f)]

- b. Particulate matter emissions from the woodworking equipment and woodwaste transfer system (**ID Nos. ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5**) shall be controlled with fabric filters (**ID Nos. BH1A/1B BH2A, BH2B, BH3, BH4, and BH5**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
- a monthly external visual inspection of each system's ductwork (including any transfer cyclones) and material collection units for leaks; and
 - an annual (for each 12-month period following the initial inspection) internal inspection of the filters housing noting the structural integrity and the condition of the fabric filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclones and fabric filters and are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The results of inspection and maintenance for the ductwork (including transfer cyclones), cyclone, and fabric filters shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each inspection; and
 - the results of maintenance performed on any control device or collection system.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the collection system/control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the woodworking equipment and woodwaste transfer system (**ID Nos. ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, once a week the Permittee shall observe the emission points of this source for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

D. Finishing operations including:

**Lap coating line (ID No. ES-LL),
Panel coating line (ID No. ES-PL),
Groove sealer spray booth (ID No. ES-SM), and
Shake edge seal spray booth (ID No. ES-SE)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM/PM10	Adequate ductwork and properly designed collectors	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521(d)
Volatile organic compounds	<i>ID No. ES-SM</i> : less than 40 tons per year	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530
Volatile organic compounds	Work Practice Standards See Section 2.2	15A NCAC 02D .0958
Toxic air pollutants	State Enforceable Only Facility-Wide Toxics Permitting Emission Rates See Section 2.2 A.3.	15A NCAC 02Q .0711
Odor	State Enforceable Only Odor control requirements See Section 2.2 A.5.	15A NCAC 02D .1806
HAPs	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Wood Building Products See Section 2.2 B.1. (<i>except spray booth ID No. ES-SE</i>)	15A NCAC 02D .1111 40 CFR 63, Subpart QQQQ
HAPs	<i>Spray booth (ID No. ES-SE)</i> : National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	15A NCAC 02D .1111 40 CFR 63, Subpart DDDD

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

Monitoring [15A NCAC 02Q .0508(f)]

- b. Particulate matter emissions from the groove sealer spray booth (**ID No. ES-SM**) and shake edge seal spray booth (**ID No. ES-SE**) shall be controlled by adequate ductwork and properly designed collectors. To assure compliance, the Permittee shall perform inspections and maintenance. As a minimum, the inspection and maintenance program shall include:
- a weekly inspection of the spray booths' filters noting the condition; and
 - an annual (for each 12-month period following the initial inspection) inspection of the associated ductwork noting structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the filters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The results of inspection and maintenance for the spray booths shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each inspection; and
 - the results of maintenance performed on any filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit the results of any maintenance performed on the filters or ductwork within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the finishing operations shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Except where the presence of uncombined water is the only reason for failure of an emission to meet the preceding limitation, the preceding limitation shall not apply.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping or reporting is required for these sources.

**3. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS
15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid applicability of this regulation, VOC emissions from the Groove Sealer spray booth (**ID No. ES-SM**) shall be less than 40 tons per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of VOC containing materials or the VOC emissions are not monitored and recorded.

- c. Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions exceed this limit.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
- i. The monthly product usage and VOC content for the previous 17 months.
 - ii. The monthly VOC emissions for the previous 17 months. The emissions shall be calculated for each of the 12-month periods over the previous 17 months.

ID No. ES-SE only:

4. 15A NCAC 02D .1111 [40 CFR Part 63, Subpart DDDD]: NESHAP for Plywood and Composite Wood Production

- a. Pursuant to Table 3 to Subpart DDDD – Work Practice Requirements, Group 1 miscellaneous coating operations shall use non-HAP coatings as defined in §63.2292. Non-HAP coating means a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens and below 1.0 percent by mass for all other HAP compounds. To demonstrate compliance, the Permittee shall submit a signed statement with the Notification of Compliance Status verifying the use of non-HAP coatings and records showing use of non-HAP coatings.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. To ensure continuous compliance, the Permittee shall keep records showing that only non-HAP coatings are being used. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the records are not maintained.

E. Natural gas-fired boiler (ID No. ES-B1)

Biomass/natural gas-fired boiler (ID No. ES-B2) with mutlicyclone (ID No. CD-1) and fan impingement type scrubber (ID No. CD-2)

Biomass/natural gas-fired boiler (ID No. ES-B3) with multicyclone (ID No. CD-3) and venturi scrubber (ID No. CD-4)* OR electrostatic precipitator (ID No. CD-4a)

**The boiler (ID No. ES-B3) shall be controlled by the venturi scrubber (ID No. CD-4) until initial startup of the electrostatic precipitator (ID No. CD-4a).*

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	ID Nos. ES-B1, ES-B2, and ES-B3: The Permittee shall not fire No. 6 fuel oil in these boilers.	15A NCAC 02D .0501(e)
	ID No. ES-B2: 92.0 pounds per hour sulfur dioxide emissions when firing any fuel combination	
	ID No. ES-B3: 43.3 pounds per hour sulfur dioxide emissions when firing any fuel combination	
particulate matter	ID No. ES-B1 ID No. ES-B2 - AOS: firing natural-gas ID No. ES-B3 - AOS: firing natural gas 0.25 pounds per million Btu heat input	15A NCAC 02D .0503
particulate matter	ID Nos. ES-B2 and ES-B3- POS: firing biomass 0.34 pounds per million Btu heat input	15A NCAC 02D .0504

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
visible emissions	ID Nos. ES-B1 and ES-B2: 40 percent opacity ID No. ES-B3: 20 percent opacity	15A NCAC 02D .0521
nitrogen oxide	ID No. ES-B3: less than 355.3 tons per year	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530
particulate matter	ID No. ES-B3: 0.10 pounds per million Btu heat input	15A NCAC 02D .0530 BACT Limit
filterable PM mercury HCl carbon monoxide	<u>For Biomass Firing (ID No. ES-B2)</u> 0.27 lb/mmBtu 5.0e-06 lb/mmBtu 0.02 lb/mmBtu 2,718 ppmvd corrected to 7% O ₂ <u>For Biomass Firing (ID No. ES-B3)</u> 0.18 lb/mmBtu 5.0e-06 lb/mmBtu 0.02 lb/mmBtu 2,718 ppmvd & 7% O ₂	15A NCAC 02D .1109
filterable PM mercury HCl carbon monoxide	<u>For Biomass Firing (ID No. ES-B3)</u> 0.18 lb/mmBtu 5.0e-06 lb/mmBtu 0.02 lb/mmBtu 2,718 ppmvd & 7% O ₂	
hazardous air pollutants	<u>For Natural Gas (ID Nos. ES-B1, ES-B2, and ES-B3)</u> Best Combustion Practices	
Various	ID No. ES-B3: (Recordkeeping only)	15A NCAC 02D .0530(u) for avoidance of 15A NCAC 02D .0530
PM10	Biomass / Natural Gas-Fired Boiler (ID No. ES-B2) with associated multicyclone and fan impingement type scrubber controlling PM10 Biomass /Natural Gas-Fired Boiler (ID No. ES-B3) with associated multicyclone and venturi scrubber controlling PM10 (The boiler (ID No. ES-B3) shall be controlled by the venturi scrubber (ID No. CD-4) until initial startup of the electrostatic precipitator (ID No. CD-4a)). Biomass /Natural Gas-Fired Boiler (ID No. ES-B3) with associated multicyclone and electrostatic precipitator controlling PM10 See Section 2.3	15A NCAC 02D .0614

POS= Primary Operating Scenario AOS=Alternative Operating Scenario

1. 15A NCAC 02D. 0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS
15A NCAC 02D. 0402: AMBIENT AIR QUALITY STANDARDS - SULFUR OXIDES

- a. Operation of the three boilers (**ID Nos. ES-B1, ES-B2, and ES-B3**) shall be limited as follows:
 - i. Emissions of sulfur dioxide from the combustion of any fuel that are discharged from boiler (**ID No. ES-B2**) into the atmosphere shall not exceed 92.0 pounds per hour.
 - ii. Emissions of sulfur dioxide from the combustion of any fuel that are discharged from boiler (**ID No. ES-B3**) into the atmosphere shall not exceed 43.3 pounds per hour.
 - iii. The Permittee shall not fire No. 6 fuel oil in the boilers (**ID Nos. ES-B1, ES-B2, and ES-B3**).

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from firing biomass or natural gas in these sources.

ID No. ES-B1

ID Nos. ES-B2 and ES-B3: AOS-firing natural gas

2. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from the boilers (**ID Nos. ES-B1, ES-B2, and ES-B3**) into the atmosphere shall not exceed 0.25 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Section 2.1 E. 2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate matter emissions from firing natural gas in these sources.

ID Nos. ES-B2 and ES-B3: POS-firing biomass fuel only

3. 15A NCAC 02D .0504: PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of wood (biomass) that are discharged from boilers (**ID Nos. ES-B2 and ES-B3**) into the atmosphere shall not exceed 0.34 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from boiler (**ID No. ES-B2**) shall be controlled by the associated multicyclone (**ID No. CD-1**) and wet scrubber (**ID No. CD-2**), and particulate matter emissions from boiler (**ID No. ES-B3**) shall be controlled by the associated multicyclone (**ID No. CD-3**) and venturi scrubber (**ID No. CD-4**)* OR electrostatic precipitator (**ID No. CD-4a**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
 - i. a monthly external visual inspection of each system's ductwork and material collection units for leaks; and
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the structural integrity of each multicyclone, scrubber, and the electrostatic precipitator.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the multicyclones, scrubbers, electrostatic precipitator, and ductwork are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. a report of any maintenance performed on any multicyclone, scrubber, or electrostatic precipitator; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if these records are not kept.

Reporting [15A NCAC 02Q .0508(f)]

- e. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones (**ID Nos. CD-1 and CD-3**), the scrubbers (**ID No. CD-2 and CD-4***) or the electrostatic precipitator (**ID No. CD-4a**).

- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**The boiler (ID No. ES-B3) shall be controlled by the venturi scrubber (ID No. CD-4) until initial startup of the electrostatic precipitator (ID No. CD-4a).*

4. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from each of these sources (ID Nos. ES-B1, ES-B2, and ES-B3) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from firing biomass or natural gas in these sources.

5. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from boiler (ID No. ES-B3) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.
- b. Visible emissions from boilers (ID Nos. ES-B1 and ES-B2) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above any limit given in Section 2.1 E.5.a-b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- d. To assure compliance, once a day the Permittee shall observe the emission points of these sources for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semiannual period. The Permittee shall establish "normal" for the boiler (ID No. ES-B3) in the first 30 days following the initial startup of the boiler (ID No. ES-B3) with associated multicyclone (ID No. CD-3) and electrostatic precipitator (ID No. CD-4a). If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.5.a-b. above.
 If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

**6. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for
15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid applicability of 15A NCAC 02D .0530(g) for major sources and major modifications, boiler B3 (**ID No. ES-B3**) shall discharge into the atmosphere less than 355.3 tons of nitrogen oxide emissions per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.6.a., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. The Permittee shall keep monthly records in a logbook (written or in electronic format) of the steam production and the amount of fuel input to the boiler (**ID No. ES-B3**). The energy input to the boiler from solid fuel shall be calculated by subtracting the energy input from fuel oil from the total energy input. Calculations shall be performed monthly to evaluate energy input to the boiler and resultant nitrogen oxide emissions. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the fuel is not monitored.
- d. The use of fuel in boiler B3 (**ID No. ES-B3**) shall be limited to 180.6 million Btu per hour per 12-month period on a 12-month rolling average to ensure that nitrogen oxide emissions shall not exceed 355.3 tons for any consecutive 12-month period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the nitrogen oxide emissions exceed the limit in Section 2.1 E.6.a.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the following:
 - i. The monthly nitrogen oxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
 - ii. The monthly energy input from solid fuels into the boiler for the previous 17 months
 - iii. The total monthly energy input into the boiler for the previous 17 months; and
 - iv. The average hourly energy input into the boiler for each of the three 12-month periods over the previous 17 months.

7. 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETRIORATION; BACT Limitation

- a. Particulate matter emissions from the boiler (**ID No. ES-B3**) shall not exceed 0.10 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E. 7. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall follow the monitoring, recordkeeping, and reporting requirements in Sections 2.1 E.3.c through f. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the emissions exceed the limit in Section 2.1 E.7.a or if the multicyclone (**ID No. CD-3**), venturi scrubber (**ID No. CD-4**),* electrostatic precipitator (**ID No. CD-4a**), or ductwork are not inspected and maintained.

The boiler (ID No. ES-B3**) shall be controlled by the venturi scrubber (**ID No. CD-4**) until initial startup of the electrostatic precipitator (**ID No. CD-4a**).*

8. ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(p)]

The Permittee, contemporaneously with making a change from one alternate operating scenario to another, shall record in a logbook (written or electronic format) the scenario under which it is operating. [15A NCAC 02Q .0508(p)]

9. 15A NCAC 02D .1109: Case-by-Case MACT

- a. The initial compliance date for these emission limitations and associated monitoring, recordkeeping, and reporting requirements is **November 1, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date. These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 02D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.
- b. The Permittee shall comply with this CAA §112(j) standard until **May 19, 2019**. The initial compliance date for the applicable CAA §112(d) standard for “National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters” is **May 20, 2019**.
- c. Emissions from these sources (**ID Nos. ES-B2 and ES-B3**) shall not exceed the emissions limitations listed below as a result of firing biomass:
 - i. Filterable PM:
 - (A) **ID No. ES-B2**: 0.27 lbs/mmBtu
 - (B) **ID No. ES-B3**: 0.18 lbs/mmBtu
 - ii. Mercury (Hg): 5.0e-06 lbs/mmBtu
 - iii. Hydrogen Chloride-equivalent (HCl): 0.02 lbs/mmBtu
 - iv. Carbon Monoxide (CO): 2,718 ppmvd, corrected to 7% oxygen
- d. Emissions from these sources (**ID Nos. ES-B1, ES-B2, and ES-B3**) shall not exceed the emission limitations listed below as a result of firing natural gas:
 - i. Work practices best combustion

Compliance Testing [15A NCAC 02Q .0508(f)]

- e. **ID Nos. ES-B2**: To demonstrate compliance with the standards provided in Section 2.1 E.9.c. above, the Permittee shall conduct compliance tests for each listed pollutant. The Permittee may choose either of the following methods for the compliance tests:
 - i. Periodic Stack Testing. Stack testing shall be performed in accordance with General Condition JJ. Tests may not be conducted during periods of startup, shutdown, or malfunction. The Permittee conducted initial stack testing on November 19, 2014. The results of the stack test showed emissions of filterable PM and CO were less than or equal to 80 percent of the allowable limit in Section 2.1 E.9.c. Therefore, the test frequency shall be reduced to once every five years for these pollutants.
 - ii. Periodic Fuel Analysis. The Permittee has elected to use fuel analysis to demonstrate compliance with the mercury and HCl standards. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation in Section 2.1 E.9.c., the Permittee shall conduct a follow-up stack test of the affected source within 90 days. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the required compliance tests are not conducted, or if the results of compliance test exceed a limit in Section 2.1 E.9.c. above.
- f. **ID Nos. ES-B3**: To demonstrate compliance with the standards provided in Section 2.1 E.9.c. above, the Permittee shall conduct compliance tests for each listed pollutant. The Permittee may choose either of the following methods for the compliance tests:
 - i. Initial & Periodic Stack Testing. Stack testing shall be performed in accordance with General Condition JJ. Stack tests shall be used to establish minimum secondary power for the associated electrostatic precipitator (**ID No. CD-4a**). Tests may not be conducted during periods of startup, shutdown, or malfunction. Following the initial compliance test, the Permittee shall test the boiler annually. Each stack test shall be conducted between 11 and 13 months after the previous stack test. However, if a stack test shows that the emission rate of any pollutant is less than or equal to 80 percent of the allowable limit, the stack test frequency shall be reduced to once every five years for that pollutant. The initial compliance test shall be conducted within 180 days of the initial startup of the boiler (**ID No. ES-B3**) with associated multicyclone (**ID No. CD-3**) and electrostatic precipitator (**ID No. CD-4a**).
 - ii. Periodic Fuel Analysis. The Permittee has elected to use fuel analysis to demonstrate compliance with the mercury and HCl standards. Fuel analyses shall be conducted annually. Following the initial fuel analysis, each analysis shall be conducted between 11 and 13 months after the previous analysis. If a fuel analysis shows a potential exceedance of an emission limitation in Section 2.1 E.9.c., the Permittee shall conduct a follow-up stack test of the affected source within 90 days. If the follow-up stack test shows an exceedance of the limit, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the required compliance tests are not conducted, or if the results of compliance test exceed a limit in Section 2.1 E.9.c. above.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- g. For each boiler equipped with a gas burner, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
 - i. Inspect the burner, and clean or replace any components of the burner as necessary except for while firing solid fuel;
 - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
 - iii. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected boilers are not inspected and maintained as required above.
- h. The results of any required annual burner inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date of each recorded action;
 - ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the boilers.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.
- i. The Permittee shall conduct annual inspections of the multicyclones (**ID Nos. CD-1 and CD-3**) and record the results of inspections as provided in Section 2.1 E.3.c. and d. of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these inspections are not performed or the required records are not created and maintained.

Operating Standards & Continuous Monitoring Requirements [15A NCAC 02Q .0508(f)]

- j. The water injection rate for the fan impingement type scrubber (**ID No. CD-2**) shall be maintained at 104.4 gallons per minute on a 12-hour block average. This operating limit was established during the performance test on November 9, 2014.
- k. The water injection rate for the venturi scrubber (**ID No. CD-4**)* shall be maintained at 953 gallons per minute on a 12-hour block average. This operating limit was established during the performance test on April 2, 2014.
- l. The secondary power of the electrostatic precipitator (**ID No. CD-4a**) shall be maintained at or above the operating limit established during the performance test on a 12-hour block average. Upon DAQ's approval of the operating limits for the electrostatic precipitator (**ID No. CD-4a**), the Permittee shall attach the approval memorandum to this permit and shall maintain the parameters within the associated operating limits contained therein.
- m. The Permittee shall install, calibrate, and maintain a liquid injection rate monitoring device at each affected scrubber (**ID No. CD-2 and CD-4***) in accordance with manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. The monitor shall be equipped with a continuous recorder. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if the required monitoring device is not installed and operated as required above.
- n. The Permittee shall install, calibrate, and maintain secondary power monitoring device at the electrostatic precipitator (**ID No. CD-4a**) in accordance with manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. The monitor shall be equipped with a continuous recorder. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if the required monitoring device is not installed and operated as required above.
- o. The Permittee shall maintain records of the continuous and 12-hour block average liquid injection rates for the fan impingement type scrubber (**ID No. CD-2**) and the venturi scrubber (**ID No. CD-4**)* and the secondary power levels for the electrostatic precipitator (**ID No. CD-4a**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the above records are not created and maintained, or if any 12-hour block average is not within the allowable limit, as provided in Sections 2.1 E.9.j. through l of this permit.

Reporting [15A NCAC 02Q .0508(f)]

- p. **Notification of Compliance Status.** The Permittee must submit a Notification of Compliance Status that meets the requirements of 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the final required performance test and/or other initial compliance demonstration, for boiler (**ID No. ES-B3**) with associated multicyclone (**ID No. CD-3**) and electrostatic precipitator (**ID No. CD-4a**). The Notification of Compliance Status report must contain the following information, as applicable:

- i. A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.
- ii. Summary of the results of all performance tests and calculations conducted to demonstrate initial compliance.
- iii. A certification signed by the Responsible Official that the facility has met all applicable emission limits and work practice standards.
- q. **Semiannual Summary Report.** The Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The first summary report shall be required on January 30, 2014. The report shall include the following:
 - i. Company name and address;
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. A summary of the results of the annual performance tests;
 - v. Signed statement indicating that no new types of fuel were fired in the affected sources.

**The boiler (ID No. ES-B3) shall be controlled by the venturi scrubber (ID No. CD-4) until initial startup of the electrostatic precipitator (ID No. CD-4a).*

10. 15A NCAC 02D. 0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

- a. The Permittee has used projected actual emissions to avoid applicability of Prevention of Significant Deterioration requirements for a project to replace the venturi scrubber used to control emissions from the biomass/natural gas-fired boiler (ID No. ES-B3) with an electrostatic precipitator (ID No. CD-4a). This project also involves removing No. 6 fuel oil as a permitted fuel at the facility and is fully described in Application No. **9700001.16A**.

Monitoring/Recordkeeping/Reporting [15A NCAC 2DQ.0508(f), 15A NCAC 2D .0530(u)]

- b. The Permittee shall maintain records of actual emissions resulting from the combustion of natural gas and biomass in the biomass/natural gas-fired boiler (ID No. ES-B3) in tons per year on a calendar year for five years following the resumption of regular operations upon commencement of the modifications described in Application No. **9700001.16A**.
- c. The Permittee shall make the information, documented and maintained in Section 2.1.E.10.b, above, available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).
- d. The Permittee shall submit a report to the Director within 60 days after the end of each year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).
- e. The Permittee shall provide a comparison of the reported actual emissions (post-construction emissions) for each of the five calendar years to the projected actual emissions (pre-construction projection) as included below:

Pollutant	Projected Actual Emissions* (tons per year)
SO ₂	17.1
NO _x	156.7
CO	410.4
PM (filterable only)	61.6
PM ₁₀	51.2
PM _{2.5}	46.1
VOC	11.63
Fluorides	0
Lead	3.56E-3
GHG	143,348

* These projections are not enforceable limitations.

If projected emissions are exceeded, consistent with 15A NCAC 02D .0530, the Permittee shall include an explanation as to why the actual rates exceeded the projection in the annual report required under Section 2.1.E.10.d.

11. NCGS 143-215.108: CONTROL OF SOURCES OF AIR POLLUTION; PERMITS REQUIRED

- a. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall submit a written notification to the Regional Supervisor of the actual date of initial startup of the boiler (**ID No. ES-B3**) with associated multicyclone (**ID No. CD-3**) and electrostatic precipitator (**ID No. CD-4a**) postmarked within 15 days after such date.

F. Two natural gas-fired temporary boilers (ID Nos. ES-B4T and ES-B5T) equipped with low-NOx burners

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	0.22 lb/million Btu heat input	15A NCAC 02D .0503
sulfur dioxide	2.3 lbs/million Btu heat input	15A NCAC 02D .0516
visible emissions	20 percent opacity	15A NCAC 02D .0521
-	Recordkeeping Requirements	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
hazardous air pollutants	Best Combustion Practices	15A NCAC 02D .1109

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas, that are discharged from these boilers into the atmosphere shall not exceed 0.22 pound per million Btu heat input each.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing 15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition J. If the results of this test are above the limit given in Section 2.1 F. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions when burning natural gas in these boilers.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions when burning natural gas from these sources.

4. 15A NCAC 02D .0524: NSPS 40 CFR 60, SUBPART Dc

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- b. In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records for each boiler on a monthly basis of the amounts of natural gas fired. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- c. In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, the Permittee is required to **NOTIFY** the DAQ in **writing** of the following:
- i. The Permittee shall report the amount of natural gas fired in each boiler on an annual basis.
 - ii. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02D .1109: CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters

- a. The initial compliance date for the work practice standard and associated monitoring, recordkeeping, and reporting requirements is **November 1, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date.
- b. The Permittee shall comply with this CAA §112(j) standard until **May 19, 2019**. The initial compliance date for the applicable CAA §112(d) standard for "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters" is **May 20, 2019**.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To assure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
- i. Inspect the burner, and clean or replace any components of the burner as necessary;
 - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
 - iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected boilers are not inspected and maintained as required above.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. The date of each recorded action;
 - ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the boilers.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. No reporting is required.

G. Trimboard Line with Cold Press (ID No. ES-TB-1);

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
toxic air pollutants	State Enforceable Only Facility-Wide Toxics Permitting Emission Rates See Section 2.2 A.3	15A NCAC 02Q .0711
odor	State Enforceable Only Odor control requirements See Section 2.2 A.5	15A NCAC 02D .1806

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	National Emission Standards for Hazardous Air Pollutants from Surface Coating of Wood Building Products See Section 2.2 B. 1.	15A NCAC 02D.1111 40 CFR 63, Subpart QQQQ

H. Two backup diesel-fired generators (each with rating up to 500 brake horsepower) (ID Nos. ES-DGEN1 and ES-DGEN2)

One temporary diesel-fired emergency generator (rating up to 2521 brake horsepower or 1880 Kilowatt, ID No. ES-DGEN3)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 lbs/million Btu heat input	15A NCAC 02D .0516
visible emissions	20 percent opacity	15A NCAC 02D .0521
-	Recordkeeping Requirements	15A NCAC 02D .0524 (40 CFR 60 Subpart IIII)
nitrogen oxides	Less than 40 tons per consecutive 12-month period for ES-DGEN1 and ES-DGEN2 and less than 40 tons per consecutive 12-month period for ES-DGEN3	15A NCAC 02Q .0317 (15A NCAC 02D .0530 Avoidance)

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions when burning diesel fuel in these generators.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions when burning diesel fuel in these generators.

3. 15A NCAC 02D .0524: NSPS 40 CFR PART 60, SUBPART IIII

- a. For any diesel-fired generator manufactured after April 1, 2006, the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524, "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart IIII, including Subpart A, "General Provisions."

Notifications and Reports [15A NCAC 02Q .0508(f)]

- b. *Initial Notification.* At least 7 days before operating any generator at the facility, the Permittee shall submit a written notification to the Regional Supervisor. In lieu of prior written notification during emergency situations,

the Permittee shall provide a phone notification with 48 hours and follow with submission of the required data within 7 days including the following information:

- i. a description of the unit including operating capacity (in kilowatts and brake horsepower);
- ii. the date the generator was manufactured;
- iii. the purpose/function of the generator;
- iv. the anticipated date for the generator start-up;
- v. the anticipated time the generator will be onsite; and
- vi. a statement indicating whether or not the generator will be affected by 15A NCAC 02D .0524 (i.e., 40 CFR 60, Subpart IIII) or 15A NCAC 02D .1111 (i.e., 40 CFR 63, Subpart ZZZZ);
- vii. Note a temporary generator will not be subject to these requirements.
- viii. Additionally, for generator (ID No. ES-DGEN3) the Permittee should provide the following information:
 - A) The name and address of the owner or operator;
 - B) The address (i.e., physical location) of the affected source;
 - C) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
 - D) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and
 - E) A statement of whether the affected source is a major source or an area source.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D.0524 if the above initial notifications are not submitted as described above.

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS

15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of 15A NCAC 02D .0530 (g) for major sources and major modifications, the diesel-fired generators (**ID Nos. ES-DGEN1 and ES-DGEN2**) shall not discharge into the atmosphere more than 40 tons of nitrogen oxides per consecutive 12-month period and the diesel-fired generator (**ID No. ES-DGEN3**) shall not discharge into the atmosphere more than 40 tons of nitrogen oxides per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 H.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/ Recordkeeping [15A NCAC 02Q .0508(f)]

- c. To ensure that nitrogen oxides emissions are less than the above-specified limits, the Permittee shall not operate the generators (**ID Nos. ES-DGEN1 and ES-DGEN2**) more than **2,500 hours combined** per consecutive 12-month period and the generator (**ID No. ES-DGEN3**) more than **500 hours** per consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the actual hours of operation for the generators exceeds this limit.
- d. To ensure compliance, the Permittee shall maintain records as follows:
 - i. the Permittee shall record and maintain records of the hours of operation for the generators (**ID Nos. ES-DGEN1, ES-DGEN2 and ES-DGEN3**) on a daily basis when the generators are in use; and
 - ii. the Permittee shall total the hours of operation for the generators (**ID Nos. ES-DGEN1, ES-DGEN2 and ES-DGEN3**) on a monthly basis.

The records of hours of operation shall be made available to an authorized representative of DAQ upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the daily hours of operation are not recorded.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. the monthly hours of operation for the generators (**ID Nos. ES-DGEN1, ES-DGEN2 and ES-DGEN3**) for the previous 17 months. The total hours of operation per 12-month period must be calculated for each month of the reporting period as defined above; and
 - ii. All instances of deviations from the requirements of this permit must be clearly identified.

I. Two diesel emergency back-up fire pumps (ID Nos. ES-FP1 and ES-FP2) (160 HP and 215 HP, respectively)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 lbs/million Btu heat input	15A NCAC 02D .0516
visible emissions	20 percent opacity	15A NCAC 02D .0521
-	Recordkeeping Requirements	15A NCAC 02D .1111 (40 CFR 60 Subpart ZZZZ)

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions when burning diesel fuel in these generators.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions when burning diesel fuel in these generators.

3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590]

- a. For these emission sources the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date [40 CFR 63.6595(a)(1)]

- c. The Permittee shall comply with the applicable requirements no later than May 3, 2013.

Notifications [40 CFR 63.6645(a)(5)]

- d. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

- e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ

Operating and Maintenance Requirements [15A NCAC 02Q .0508(b)]

- f. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not

to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6602 and 63.6625(h)]

- g. Except during periods of startup of the IC engine, the Permittee shall:
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary[40 CFR 63.6602, Table 2C]
- h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in condition g. [40 CFR 63.6602, Table 2C, 63.6625(i)]
- i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in condition g., or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6602, Table 2C]
- j. The permittee shall be in compliance with the emission limitations and operating limitations in this subpart that apply at all times. [40 CFR 63.6605(a)]
- k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6]
- m. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in these conditions, is prohibited. [40 CF 63.6640(f)(1)]
- n. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)(i)]
- o. The Permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(1)(ii)]
- p. The Permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
 - i. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level.
 - ii. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent.
 - iii. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations.
 - iv. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power. [40 CFR 63.6640(f)(1)(iii)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if conditions **e. through p.** are not met.

Monitoring [15A NCAC 02Q .0508(f)]

- q. The Permittee shall install a non-resettable hour meter on the IC engine if one is not already installed. [40 CFR 63.6625(f)]

Recordkeeping [15A NCAC 02Q .0508(f)]

- r. The Permittee shall keep the following:
- i. A copy of each notification and report that submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
 - ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - iii. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
 - iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with **condition k.**, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
 - v. Records of the maintenance conducted on the RICE pursuant to **condition l.** [40 CFR 63.6655(d) and (e)]
 - vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)(1)]
- s. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a),(b),(c)]
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if conditions **q. through s.** are not met.

Reporting [15A NCAC 02Q .0508(f)]

- t. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b),(e), and 63.6650(f)]
- i. The summary report shall also include any reporting required under **condition i.**, as necessary. [40 CFR 63.6602, Table 2C]
- The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111 if **condition t** is not met.

J. Waste water treatment plant. (ID No. ES-WWTP)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	State Enforceable Only Facility-Wide Toxics Permitting Emission Rates See Section 2.2 A.2	15A NCAC 02Q .0711
HAPs	National Emission Standards for Hazardous Air pollutants from Plywood and Composite Wood Products See Section 2.1 B. above	15A NCAC 02D.1111 40 CFR 63, Subpart DDDD

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide emission sources

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	Work practice standards	15A NCAC 02D .0958
Toxic air pollutants	State Enforceable Only Facility-Wide Toxics Permitting Emission Rates	15A NCAC 02Q .0711
Odorous emissions	State Enforceable Only Odor control requirements	15A NCAC 02D .1806

1. 15A NCAC 02D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

- a. Pursuant to 15A NCAC 02D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions, the Permittee shall:
 - i. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
 - ii. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
 - iii. store wipe rags containing volatile organic compounds in closed containers,
 - iv. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
 - v. transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
 - vi. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 02D .0958(c)]
- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
 - i. flush parts in the freeboard area,
 - ii. take precautions to reduce the pooling of solvent on and in the parts,
 - iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
 - iv. not fill cleaning machines above the fill line,
 - v. not agitate solvent to the point of causing splashing. [15A NCAC 02D .0958(d)]

Monitoring 15A NCAC 02Q .0508(f)]

- c. To assure compliance with paragraphs (a) and (b) above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing volatile organic compounds. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0958.

Recordkeeping 15A NCAC 02Q .0508(f)]

- d. The results of the inspections shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each inspection; and
 - ii. the results of each inspection noting whether or not noncompliant conditions were observed.If the required records are not maintained the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0958.

Reporting 15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year

for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

STATE ENFORCEABLE ONLY

- 2. 15A NCAC 02D .1100 CONTROL OF TOXIC AIR POLLUTANTS** – Pursuant to 15A NCAC 02D .1100, “Control of Toxic Air Pollutants,” and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

EMISSION SOURCES	TOXIC AIR POLLUTANT	EMISSION LIMITS
Fuel wood system (ID No. ES-FS1)	Acrolein	0.067 lbs/hr
	Acetaldehyde	0.169 lbs/hr
	Formaldehyde	0.015 lbs/hr
	Phenol	0.210 lbs/hr
	Methyl Ethyl Ketone	0.620 lbs/hr 14.880 lbs/day
Various gasoline tanks (Permit exempt equipment)	Benzene	11.476 lbs/yr
	Toluene	2.952 lbs/day

STATE ENFORCEABLE ONLY

3. 15A NCAC 02Q .0711: PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS

Pursuant to 15A NCAC 02Q .0711 “Emission Rates Requiring a Permit,” for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permitting Emission Rates (TPERs) listed in 15A NCAC 02Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.

- A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D .1100 “Control of Toxic Air Pollutants.”
- In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

TPER Limitations				
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute systemic toxicants (lb/hr)	Acute irritants (lb/hr)
Ammonia (7664-41-7)	----	----	----	0.68
Beryllium (7440-41-7)	0.28	----	----	----
Carbon disulfide (75-15-0)	----	3.9	----	----
Carbon tetrachloride (56-23-5)	460	----	----	----
Chlorobenzene (108-90-7)	----	46	----	----
Chloroform (67-66-3)	290	----	----	----
Ethylene glycol monoethyl ether (110-80-5)	----	2.5	0.48	----
n-Hexane (110-54-3)	----	23	----	----
Hydrogen chloride (7647-01-0)	----	----	----	0.18
Hydrogen cyanide (74-90-8)	----	2.9	0.28	----

TPER Limitations				
Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute systemic toxicants (lb/hr)	Acute irritants (lb/hr)
Hydrogen fluoride (7664-39-3)	----	0.63	----	0.064
Manganese and compounds	----	0.63	----	----
Mercury, aryl & inorganic compounds	----	0.013	----	----
Mercury, vapor (7439-97-6)	----	0.013	----	----
Methyl chloroform (71-55-6)	----	250	----	64
Methylene chloride (75-09-2)	1,600	----	0.39	----
Pentachlorophenol (87-86-5)	----	0.063	0.0064	----
Perchloroethylene (127-18-4)	13,000	----	----	----
Polychlorinated biphenyls (1336-36-3)	5.6	----	----	----
Styrene (100-42-5)	----	----	2.7	----
Tetrachlorodibenzo-p-dioxin (1746-01-6)	0.00020	----	----	----
Trichloroethylene (79-01-6)	4000	----	----	----
Xylene (1330-20-7)	----	57	----	16.4

STATE ENFORCEABLE ONLY**4. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

B. Finishing operations including:

**Lap coating line (ID No. ES-LL),
Panel coating line (ID No. ES-PL),
Groove sealer spray booth (ID No. ES-SM), and
Trimboard Line with Cold Press (ID No. ES-TB-1)**

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	National Emission Standards for Hazardous Air pollutants from Surface Coating of Wood building Products	15A NCAC 02D.1111 40 CFR 63, Subpart QQQQ

1. 15A NCAC 02D .1111 [40 CFR Part 63 Subpart QQQQ]:

NESHAP for Surface Coating of Wood Building Products

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart QQQQ by May 28, 2006. [40 CFR 63.4683(b)]

Compliance Option and Emission Limit

- a. The Permittee must include all coatings, thinners, and cleaning materials used in the affected source when determining the organic HAP emission rate is equal to or less than the applicable emission limit of 0.06 lbs HAP/gal solids.
- b. The Permittee shall use the "compliant material option" to demonstrate that the organic HAP content of each coating used in the coating operations is less than or equal to the applicable emission limit in 2.2 B. 1. a, above and use no thinner or cleaning material that contains organic HAP that was not used for the determination of the initial compliance. [40 CFR 63.4742(a)]

Initial Compliance period

- c. The initial compliance period began on May 28, 2006 and ended on the last day of the 12th month following the compliance date. [40 CFR 63.4683(b)]

Demonstrate continuous compliance

- d. For each compliance period to demonstrate continuous compliance, the Permittee must not use any coating for which the organic HAP content exceeds the emission limit in 2.2 B. 1. a., and use no thinner or cleaning material that contains organic HAP that was not used for the determination of the initial compliance. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in Section 2.2 B.1.c., above is the end of a compliance period consisting of that month and the preceding 11 months. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the HAP content exceeds the emission limit in Section 2.2 B.1.a., or the Permittee has used thinner or cleaning material that contains organic HAP that was not used for the determination of the initial compliance.

Recordkeeping Requirements

- e. The Permittee shall keep a copy of each notification and report that was submitted to comply with this MACT and the documentation supporting each notification and report.
- f. The Permittee shall keep a current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating. If the Permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the Permittee shall keep a copy of the complete test report. If the Permittee use information provided by the manufacturer or supplier of the material that was based on testing, the Permittee must keep the summary sheet of results provided by the manufacturer or supplier. The Permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
- g. For each compliance period, the Permittee shall keep the records as specified below:
 - i. A record of the coating operations at which each compliance option was used and the time periods (beginning and ending dates and times) this option was used.
 - ii. For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.4741.
 - iii. A record of the name and volume of each coating, thinner, and cleaning material used during each compliance period.

- iv. A record of the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period.
- v. A record of the volume fraction of coating solids for each coating used during each compliance period.
- vi. A record of the density for each coating used during each compliance period; and, if the Permittee uses either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each thinner and cleaning material used during each compliance period.
- h. As specified in 40 CFR 63.10(b)(1), the Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee shall keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The Permittee may keep the records off-site for the remaining 3 years.
- i. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the Permittee fails to maintain records as specified in Sections 2.2.B.1.e through h.

Reporting Requirements

- j. The Permittee shall submit a semiannual compliance report and must contain the information specified below:
 - i. Company name and address.
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note - that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation. Each compliance report must be postmarked or delivered no later than July 31 or January 31 for the semiannual reporting period ending on June 30 and December 31, respectively.
 - iv. Identification of the compliance option to meet the above emissions limit.
 - v. If there were no deviations from the emission limits as mentioned above, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.
 - vi. If there was a deviation from the above emission limit for the compliant material option, the semiannual compliance report must contain the following information:
 - (A) Identification of each coating used that deviated from the emission limit, each thinner and cleaning material used that contained organic HAP, and the dates and time periods each was used.
 - (B) The calculation of the organic HAP content (using Equation 2 of 40 CFR 63.4741) for each coating identified. The Permittee is not required to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).
 - (C) The determination of mass fraction of organic HAP for each coating, thinner, and cleaning material identified. The Permittee is not required to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).
 - (D) A statement of the cause of each deviation.
- k. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the Permittee fails to report all the information in the compliance report in a timely manner as specified in Sections 2.2.B.1.j.

2.3 – 15A NCAC 02D .0614: Compliance Assurance Monitoring

Per 40 CFR Part 64 and 15A NCAC 02D .0614, the Permittee shall comply with the following:

A. Woodwaste Collection and Transfer Systems (ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5) Bagfilters Controlling PM10:

I. Background	
Emission Unit	Woodwaste Collection and Transfer Systems Emission Source IDs: ES-1A/1B, ES-2A, ES-2B, ES-3, ES-4, and ES-5
Control Device	Bagfilters Control Device IDs: BH1A/1B, BH2A, BH2B, BH3, BH4, and BH5
Applicable Regulations & Emission Limits	02D.0512: Particulates from Miscellaneous Wood Products Finishing Plants <ul style="list-style-type: none"> PM/PM10: Adequate ductwork and properly designed collectors 02D.0521: Control of Visible Emissions <ul style="list-style-type: none"> Opacity: 20% opacity when averaged over a 6-minute period
Are the units major sources post-control?	No. See Title V renewal application submitted in 2008.
II. Monitoring Approach	
CAM Indicators	Baghouses inspection/maintenance. Visual emissions observations.
Measurement Approach/ Monitoring Frequency	Inspections and maintenance shall be performed on the baghouses as recommended by the manufacturer, including at a minimum: monthly external visual inspections of the ductwork and collection units, and annual internal inspection of the baghouses for structural integrity. Conduct daily visible emissions observations from each bagfilter outlet.
Indicator Range	Abnormal condition of the baghouses will trigger corrective action, which could include repair of components. An excursion is defined as the presence of visible emissions.
Justification/ Rationale	Condition of the control devices is the main indicator of performance of the device.
III. Performance Criteria	
Data Representativeness	Personnel will perform visual inspections of the equipment. Personnel will perform visible emissions observations from each bagfilter outlet.
QA/QC Practices and Criteria	Personnel performing inspections/maintenance/observations will be properly trained.
Data Collection Procedures	An electronic or written logbook will be kept of all control device inspections/observations and corrective actions.
Averaging period	N/A
IV. Reporting [15A NCAC 02Q .0508(f) and 40 CFR §64.9]	
<p>The Permittee shall submit a summary report of the monitoring postmarked or delivered on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall also include the following information, as applicable:</p> <ol style="list-style-type: none"> Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. 	

B. Biomass / Natural Gas-Fired Boiler (ES-B2) Multicyclone and Wet Scrubber Controlling PM10:

I. Background	
Emission Unit	Biomass / Natural Gas-Fired Boiler Emission Source ID: ES-B2
Control Device	Multicyclone Control Device ID: CD-1 Fan Impingement Type Scrubber Control Device ID: CD-2
Applicable Regulations & Emission Limits	02D.0504: Particulates from Wood Burning Indirect Heat Exchangers • PM: 0.34 lb/MMBtu
Is the unit a major source post-control?	No. See results of stack test conducted on November 19, 2014 and emission factor for condensable PM.
II. Monitoring Approach	
CAM Indicators	Multicyclone and wet scrubber inspection/maintenance. Liquid scrubber flow rate
Measurement Approach/ Monitoring Frequency	Inspections and maintenance shall be performed on the multicyclone and the wet scrubber as recommended by the manufacturer, including at a minimum: monthly external visual inspections of the ductwork and collection units, and annual internal inspection of the multicyclone and scrubber for structural integrity. Liquid scrubber flow rate will be monitored continuously with a minimum of 4 data points (every 15 minutes) recorded each hour. The average flow rate will be determined and recorded for each 12-hour block average.
Indicator Range	Abnormal condition of the multicyclone or wet scrubber will trigger corrective action, which could include repair of components. 12-hour block average flow rates of less than the minimum of 104.4 gallons per minute will trigger corrective action.
Justification/ Rationale	Condition of the control devices and the rate of liquid make-up to the scrubber are indicative of acceptable performance of the control equipment. An excursion is defined as a 12-hour block average flow rates of less than the minimum of 104.4 gallons per minute. An excursion will trigger corrective action.
III. Performance Criteria	
Data Representativeness	Personnel will perform visual inspections of the equipment. The continuous monitoring system is certified by the manufacturer to have an accuracy of $\pm 1\%$ of the flow rate.
QA/QC Practices and Criteria	Personnel performing inspections/maintenance will be properly trained. Monitors will be calibrated and maintained per manufacturer's recommendations.
Data Collection Procedures	An electronic or written logbook will be kept of all control device inspections and corrective actions. A data logger system will record the flow rate continuously and compute the average flow for each 12-hour block average.
Averaging period	There are no averaging periods associated with inspections. 12-hour block averages

IV. Reporting [15A NCAC 02Q .0508(f) and 40 CFR §64.9]	
<p>The Permittee shall submit a summary report of the monitoring postmarked or delivered on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall also include the following information, as applicable:</p> <ol style="list-style-type: none"> Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. 	

C. Biomass / Natural Gas-Fired Boiler (ES-B3) Multicyclone and Wet Scrubber Controlling PM₁₀:

I. Background	
Emission Unit	Biomass / Natural Gas-Fired Boiler Emission Source ID: ES-B3
Control Device	<p>Multicyclone Control Device ID: CD-3</p> <p>Venturi Scrubber* Control Device ID: CD-4</p> <p>* The boiler (ID No. ES-B3) shall be controlled by the venturi scrubber (ID No. CD-4) until startup of the electrostatic precipitator (ID No. CD-4a).</p>
Applicable Regulations & Emission Limits	<p>02D .0504: Particulates from Wood Burning Indirect Heat Exchangers</p> <ul style="list-style-type: none"> PM: 0.34 lb/MMBtu <p>2D.0530: PSD; BACT Limitation</p> <p>PM: 0.10 lb/MMBtu</p>
Is the unit a major source post-control?	No based on the BACT limit for filterable PM and emission factor for condensible PM
II. Monitoring Approach	
CAM Indicators	<p>Multicyclone and wet scrubber inspection/maintenance.</p> <p>Liquid scrubber flow rate</p>
Measurement Approach/ Monitoring Frequency	<p>Inspections and maintenance shall be performed on the multicyclone and the wet scrubber as recommended by the manufacturer, including at a minimum: monthly external visual inspections of the ductwork and collection units, and annual internal inspection of the multicyclone and scrubber for structural integrity.</p> <p>Liquid scrubber flow rate will be monitored continuously with a minimum of 4 data points (every 15 minutes) recorded each hour. The average flow rate will be determined and recorded for each 12-hour block average.</p>
Indicator Range	<p>Abnormal condition of the multicyclone or wet scrubber will trigger corrective action, which could include repair of components.</p> <p>12-hour block average flow rates of less than the minimum of 953 gallons per minute will trigger corrective action.</p>

Justification/ Rationale	<p>Condition of the control devices and the rate of liquid make-up to the scrubber are indicative of acceptable performance of the control equipment.</p> <p>An excursion is defined as a 12-hour block average flow rates of less than the minimum of 953 gallons per minute. An excursion will trigger corrective action.</p>
III. Performance Criteria	
Data Representativeness	<p>Personnel will perform visual inspections of the equipment.</p> <p>The continuous monitoring system is certified by the manufacturer to have an accuracy of $\pm 1\%$ of the flow rate.</p>
QA/QC Practices and Criteria	<p>Personnel performing inspections/maintenance will be properly trained.</p> <p>Monitors will be calibrated and maintained per manufacturer's recommendations.</p>
Data Collection Procedures	<p>An electronic or written logbook will be kept of all control device inspections and corrective actions.</p> <p>A data logger system will record the flow rate continuously and compute the average flow for each 12-hour block average.</p>
Averaging period	<p>There are no averaging periods associated with inspections.</p> <p>12-hour block averages</p>
IV. Reporting [15A NCAC 02Q .0508(f) and 40 CFR §64.9]	
<p>The Permittee shall submit a summary report of the monitoring postmarked or delivered on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall also include the following information, as applicable:</p> <ul style="list-style-type: none"> iv. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; v. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and vi. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. 	

D. Biomass / Natural Gas-Fired Boiler (ES-B3) Multicyclone and Electrostatic Precipitator Controlling PM₁₀:

I. Background	
Emission Unit	Biomass / Natural Gas-Fired Boiler Emission Source ID: ES-B3
Control Device	<p>Multicyclone Control Device ID: CD-3</p> <p>Electrostatic precipitator (ESP) Control Device ID: CD-4a</p>
Applicable Regulations & Emission Limits	<p>02D .0504: Particulates from Wood Burning Indirect Heat Exchangers</p> <ul style="list-style-type: none"> • PM: 0.34 lb/MMBtu <p>2D.0530: PSD; BACT Limitation PM: 0.10 lb/MMBtu</p>
Is the unit a major source post-control?	No based on the BACT limit for filterable PM and emission factor for condensible PM.

II. Monitoring Approach	
CAM Indicators	<p>Multicyclone and electrostatic precipitator inspection/maintenance.</p> <p>ESP secondary power during normal operation of the boiler.</p>
Measurement Approach/ Monitoring Frequency	<p>Inspections and maintenance shall be performed on the multicyclone and ESP as recommended by the manufacturer, including at a minimum: monthly external visual inspections of the ductwork and collection units, and annual internal inspection of the multicyclone and ESP for structural integrity.</p> <p>ESP secondary power will be monitored continuously during normal operation of the boiler, with a minimum of 4 data points (every 15 minutes) recorded each hour. The average total secondary power in watts will be determined and recorded for each hour and used to determine as 12-hour block average.</p>
Indicator Range	<p>Abnormal condition of the multicyclone or ESP will trigger corrective action, which could include repair of components.</p> <p>An excursion is defined as a 12-hour block average for total secondary power of less than the minimum established during the most recent stack test. An excursion will trigger corrective action.</p>
Justification/ Rationale	<p>Condition of the control devices and the ESP secondary power are indicative of acceptable performance of the control equipment.</p> <p>Taking action when a 12-hour block average of secondary power measurement is less than the minimum level established during the most recent stack test will the plant to remain in compliance.</p>
III. Performance Criteria	
Data Representativeness	<p>Personnel will perform visual inspections of the equipment.</p> <p>Monitors are installed and maintained in a manner that provides representative data.</p>
QA/QC Practices and Criteria	<p>Personnel performing inspections/maintenance will be properly trained.</p> <p>Monitors will be calibrated and maintained per manufacturer's recommendations.</p>
Data Collection Procedures	<p>An electronic or written logbook will be kept of all control device inspections and corrective actions.</p> <p>A data logger system will record the ESP total secondary power continuously and compute the 12-hour block average.</p>
Averaging period	<p>There are no averaging periods associated with inspections.</p> <p>ESP secondary power measurements are based on 12-hour block averages</p>
IV. Reporting [15A NCAC 02Q .0508(f) and 40 CFR §64.9]	
<p>The Permittee shall submit a summary report of the monitoring postmarked or delivered on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall also include the following information, as applicable:</p> <ol style="list-style-type: none"> Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. 	

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.

3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and

4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR § 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

- d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound